This presentation should not be considered a final statement of NIOSH policy or of any agency or individual who was involved. This information is intended for use in advancing knowledge needed to protect workers. Comments regarding this presentation may be submitted to the NIOSH Docket Office.

CBRN PAPR Standard Development CBRN PAPR CWA Concept

 Sarin (GB) and Mustard (HD) challenge vapor concentrations are based upon the CBRN APR standard









CBRN PAPR Standard Development

CBRN PAPR CWA Concept

- Sarin (GB):
 - Vapor Challenge 210 mg/m³
 - Breakthrough 0.044 mg/m³ Peak
 - 1.05 mg min/m³ Ct
 - Time Agent Generated = 30 minutes
 - Total Test Time = 8 hours









CBRN PAPR Standard Development

CBRN PAPR CWA Concept

- Mustard (HD):
 - Vapor Challenge 50 mg/m³
 - Liquid Challenge 0.43 0.86 ml
 - Breakthrough 0.30 mg/m³ Peak
 - - 3.0 mg min/m³ Ct
 - Time Agent Generated = 30 minutes vapor; liquid applied for last 2 hours
 - Total Test Time = 8 hours









The Protective Equipment Team Aberdeen Proving Ground Edgewood Area Edgewood, Maryland

Raymond R. Lins 16 October 2003









Protective Equipment Team Accreditations

• Accredited for International Standard ISO/IEC 17025 certified by American Association for Laboratory Accreditation (A2LA)

- Certified Testing Laboratory for National Institute for Occupational Safety and Health (NIOSH)
- ASTM 739 Certified by A2LA for NFPA Swatch Testing









Protective Equipment Team Swatch Testing

- 3 Sets of Six Swatch Test Systems using MINICAMS for agent detection
- 1 set of Six Swatch Cups for Vapor or Liquid challenge using a MINICAM for agent detection
- 1 set of 6 Dawson Cups with a MINICAM for agent detection
- 2 Hoods with holders for 100 fly cups
- 1 Q170 Tester









(SiMulant Agent Resistant Test MANikin)

Over 1000 Test completed using The SMARTMAN Test System

- Escape Masks
- Powered Air Purifying Respirators
 - Air purifying Respirators
 - SCBA
 - Self Contained Respirators





























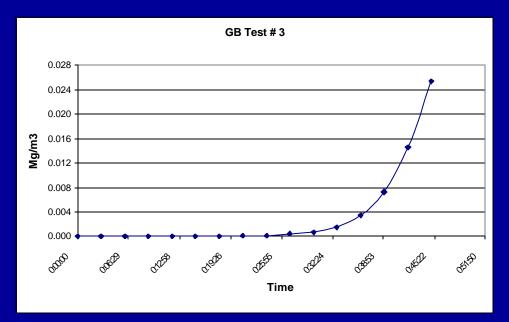


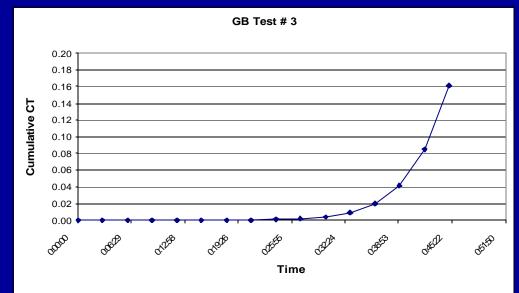










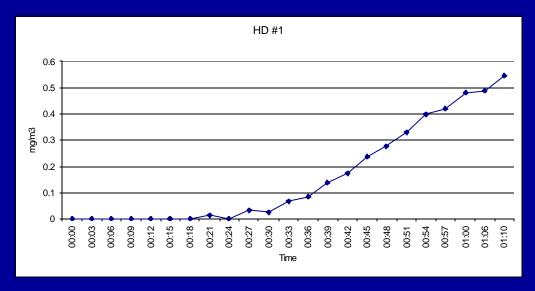


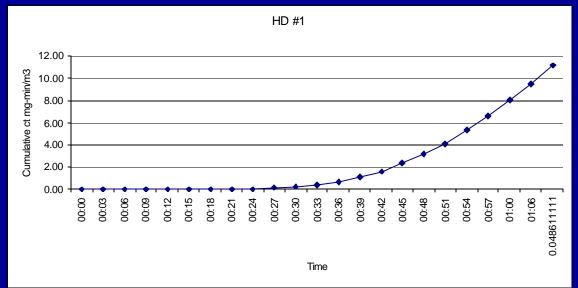










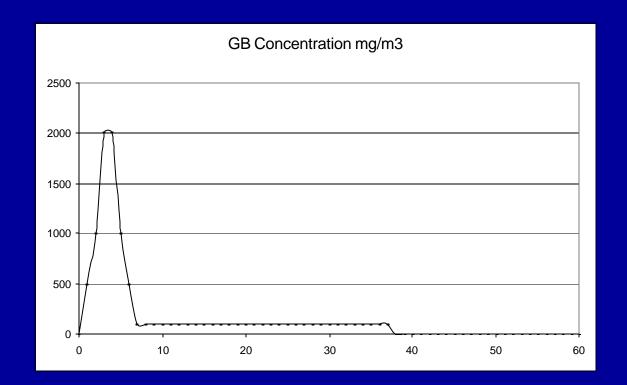




















Protective Equipment Team SMARTMAN Test Systems

- 5 Medium SMARTMAN Agent Test Systems
- 1 Medium SMARTMAN CK Test System
- 1 Medium SMARTMAN Leak Test System
- 2 Small SMARTMAN Leak Test Systems
- 1 Small SMARTMAN Agent Test System
- November 2003 2 Medium SMARTMAN Test Systems
- December 2003 2 Additional Medium SMARTMAN
 Test Systems With Automated Breathing Simulators







